

Energy Manual Guidelines

Consider the development and implementation of an energy manual

In an ISO 50001-2011 continual improvement-based energy management system (EnMS), the organization must:

- determine how it will meet the requirements of the EnMS so as to achieve continual improvement in both energy performance and the EnMS; and
- maintain information that describes the core elements of the EnMS and their interaction.

This is usually accomplished through the development and implementation of an energy manual. However, an energy manual is not required, although it is recommended.

The benefits of an energy manual

An energy manual can provide several benefits:

- As a documented overview or summary of the EnMS that is approved by top management, the energy manual serves as a tool to establish and communicate the energy management commitments of the organization.
- The energy manual is useful to management, employees and potentially other stakeholders as a “roadmap” to the EnMS, including information on the components of the system, how those components interact, and direction to the associated processes, procedures, and roles and responsibilities.
- The energy manual is a convenient mechanism for documenting some of the information about the EnMS that must be documented, such as the scope and boundaries of the EnMS and the energy policy. This can enable the organization to avoid the creation of additional documents that then would have to be managed
- For smaller organizations, the energy manual can be useful as a “one-stop shop” document that contains present-day information about the EnMS.
- For organizations that are implementing an ISO 50001 EnMS, the energy manual can be a document that serves to translate the requirements of the ISO 50001 standard into the organization’s own terminology.

Tip: Although the terms used in the ISO 50001 standard can be changed into the organization’s own terminology, the meaning of those terms (i.e. the definitions) cannot be changed. For example, an organization may refer to the “energy

review” required by ISO 50001 as an “energy profile;” however, the definition of what is an energy profile is the same as the definition of an energy review.

Organizations which have already implemented continual improvement based management systems (e.g., ISO 14001, ISO 9001, OHSAS 18001, etc.) may choose to integrate their energy manual into an existing environmental, quality or other management system manual. This option allows an organization to avoid having to manage and train on multiple management system manuals and can facilitate the integration of management systems for sustainability or other business purposes.

The format, detail and length of an energy manual

There is no required format for an energy manual. It can be in any media. The energy manual may be:

- a stand-alone document, maintained separately from energy management system procedures;
- a single document that includes the organization’s EnMS procedures;
- incorporated into another management system manual or other documents;
- an electronic-based hierarchical index or other electronic format, typically with hyperlinks to EnMS documents (such as plans, procedures, blank forms, etc.); or
- any combination of the above.

The energy manual’s format and level of detail will vary according to the size and complexity of the organization and the needs and expectations of the organization and its interested parties.

Tip: Although less detail may be needed in some sections of the manual if details are provided in other EnMS documents such as documented procedures. On the other hand, additional detail in some sections of the manual can help avoid development of additional and potentially unnecessary EnMS documents.

As a general rule of thumb, a stand-alone energy manual is 5-15 pages in length. The language and terminology used in the energy manual should be understandable to users, not designed for auditors.

Tip: Less detail may be needed in some sections of the manual if details are provided in other EnMS documents such as documented procedures. On the other hand, additional detail in some sections of the manual can help avoid development of additional and potentially unnecessary EnMS documents.

Like other EnMS documents, the energy manual must be controlled. (See Step 3.3 for information on control of EnMS documents.) Top management is usually the designated approver(s) of the energy manual.

Tip: The energy manual may be a means to demonstrate approval of the energy policy by top management.

Items to be included in an energy manual

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The following items can be included in the energy manual:

- The scope and boundaries of the organization's energy management system

The scope of the system is the operations, activities, and facilities that are included in the EnMS. The organization must define the boundaries or physical, site, or organizational limits of its EnMS. The scope and boundaries statement would address both the operational and the geographic boundaries of the system. For example: The scope and boundaries of XYZ Company's energy management system are the manufacturing, warehousing and distribution operations and activities of the Rockmart Georgia site located at 333 Railroad Drive, Rockmart, Georgia.

- A description of the core elements of the energy management system and their interaction

A common approach to describing the core elements of the EnMS involves brief descriptions of each of the processes involved in the Plan-do-Check-Act continual improvement cycle. More detailed information on those processes would be available in other documents (such as plans, programs, procedures, work instructions, forms and others) or embedded within the organization's training and communications.

Organizations implementing an ISO 5001 EnMS for third-party certification should avoid preparing an energy manual that copies the clauses of the ISO 50001 standard as the description of the core elements of the EnMS. Such an approach is typically frowned on by third-party certification bodies.

The description of the interaction of the core elements of the EnMS is often represented graphically, rather than by text. Most frequently, a graphic representation of the Plan-Do-Check-Act continual improvement cycle is used that identifies the organization's specific processes for energy planning, implementation and operation, checking and management review. Graphics are also used to represent how energy applies within the defined scope and boundaries of the organization's EnMS. Such graphics may be a process map or other visual representation of the energy sources.

- Key EnMS documents or reference to them

Smaller organization may decide to include their EnMS documents (such as procedures, plans, work instructions, blank forms, and others) within the energy manual. This does provide a one-stop source for all of the organization's EnMS documents, although it can present some document control challenges.*

**If the energy manual with all EnMS documents included is controlled as a single document, then the addition, deletion or change of any one of those documents within the manual will need approval/re-approval and a change in revision status for the entire energy manual. On the other hand, if each section of the manual with all procedures included is controlled separately, then the revision status of each section may vary and a master table of contents or a master list may be needed to ensure that the current*

revision status of each section of the manual can be determined. Also, if each section of the manual is controlled separately, there may be different approvers for each section. The document control system must ensure that there is evidence of approval by the appropriate designated approver.

Many organizations decide to maintain and control the energy manual as a single document and only include within it references to related EnMS documents. These references may be embedded in each section, listed at the end of each section or listed on a document reference table that appears as the last page of the manual. One of the advantages of using a document reference table is that it is easily updated when necessary and avoids the need to review and locate references to other EnMS documents within each section of the manual.

For example:

EnMS Documents Reference Table	
Topic	Document Reference
Energy planning	EnP-01 Energy Planning Procedure EnD-02 Energy Legal and Other Requirements Table EnD-03 Energy Objectives and Targets EnD-03.x (series) Energy Management Action Plans
...	...
Energy training and awareness	EnP-02 Energy Awareness and Training Plan
...	...